



Celestial Navigation in the Owens Planetarium

Project Description: Make your way across the ocean as did the early navigators, using the positions of the stars as reference points. Learn to use the ancient tools necessary to pinpoint your location, and compare to the modern GPS systems.

Activities:

- Determine the starting location and destination location for the voyage. Identify the latitude and longitude of each location. Consider selecting locations that retrace the steps of a historical journey such as the voyage of the Vikings or Pilgrims.
- Identify the stars that could be used to navigate by. Identify the tools needed to determine your position (e.g. sextant, star almanacs).
- Develop interactive planetarium activities for students to participate in which simulate actual celestial navigation.
- Compare celestial navigation process to GPS systems (triangulation using artificial satellites).
- Design diagrams, videos, and other visuals to support student understanding of concepts developed. (Can use existing materials if there are no copyright restrictions)
- Storyboard a program to be developed into a planetarium program for students/public.

Use resources such as:
<http://www.celestialnavigation.net/>

Disciplines Involved:

Astronomy
Geography
Social Studies
Mathematics

